

WE CLAIM:

- 1 1. A method of tracking a security state for an intermodal container through a
2 global supply chain, comprising:
3 initiating a security state for the intermodal container with information submitted by a
4 first trusted agent located at a first checkpoint;
5 continuously monitoring the security state of the container during transport between
6 the first checkpoint and a second checkpoint, the security state adapted to
7 change responsive a security breach; and
8 sending the security state to a second trusted agent located at the second checkpoint
9 for validation.
- 1 2. The method of claim 1, wherein the step of initiating the security state
2 comprises initiating the security state to a secure state responsive to an inspection by the first
3 trusted agent.
- 1 3. The method of claim 1, wherein the step of continuously monitoring the
2 security state comprises changing the security state responsive to a security breach defined
3 by security business rules.
- 1 4. The method of claim 1, wherein the step of initiating the security state
2 comprises initiating the security state with a required body of information comprising an
3 expected transport route between the first checkpoint and the second checkpoint, and wherein
4 the step of monitoring the security state comprises changing the security state if the actual
5 transport route deviates from the expected transport route.
- 1 5. The method of claim 1, wherein the step of initiating the security state
2 comprises initiating the security state with a required body of information comprising
3 information related to authorized unsealing of the container, and wherein the monitoring the
4 security state comprises changing the security state if the container is unsealed without
5 authorization between the first checkpoint and the second checkpoint.

1 6. The method of claim 1, wherein the step of initiating the security state
2 comprises initiating the security state with the required body of information comprising
3 information concerning a unique identifier assigned to a seal that locks the container, and
4 wherein the step of monitoring the security state comprises using the unique identifier to
5 continually monitor the seal for a status.

1 7. The method of claim 6, wherein the status comprises one from the group
2 consisting of: door open, attempt to open door, door closed, door locked, right door open, and
3 more than one door open.

1 8. The method of claim 6, wherein the status comprises an environmental state
2 from the group consisting of: temperature, humidity, vibration, shock, light, and radiation.

1 9. The method of claim 1, further comprising the steps of:
2 detecting the security breach; and
3 resetting the security state responsive to the second agent submitting an indication
4 that the container was resecured.

1 10. The method of claim 1, further comprising the steps of:
2 receiving an inspection request from an authority; and
3 changing the security state responsive to the inspection request.

1 11. The method of claim 1, further comprising the steps of:
2 submitting a required body of information, including the information, to an authority;
3 wherein the authority sends the inspection request responsive to the required body of
4 information.

1 12. The method of claim 1, wherein the first agent is located at an origin port of
2 an export country and the second agent is located at a destination port of an import country.

1 13. The method of claim 1, wherein the step of monitoring comprises the steps of:
2 receiving monitor information from a first reader at the first checkpoint through a first
3 control center;

4 receiving monitor information from a second reader on a transportation device; and
5 receiving monitor information from a third reader at the second checkpoint through a
6 second control center.

1 14. The method of claim 1, wherein the container comprises an RFID (Radio
2 Frequency IDentification) tag, and the first, second, and third readers each comprise an RFID
3 reader.

1 15. A security state system for tracking a container through a global supply chain,
2 comprising:
3 a required body of information module to store information concerning the container
4 submitted by a first trusted agent located at a first checkpoint; and
5 a security state module, coupled to the information module, the security state module
6 initiating the security state based on the information, continuously monitoring
7 the security state between the first checkpoint and a second checkpoint, the
8 security state adapted to change responsive to a security breach, and the
9 security state module sending the security state to a second trusted agent at the
10 second checkpoint for validation.

1 16. The system of claim 15, wherein the security state module initiates the
2 security state to a secure state responsive to an inspection by the first trusted agent.

1 17. The system of claim 15, wherein the security state module further comprises
2 to change the security state responsive to a security breach defined by security business rules.

1 18. The system of claim 15, wherein the information comprises an expected
2 transport route between the first checkpoint and the second checkpoint, and wherein the
3 security state module changes the security state if the actual transport route deviates from the
4 expected transport route.

1 19. The system of claim 15, wherein the information comprises authorized
2 unsealing of the container, and wherein the security state module changes the security state if

3 the container is unsealed without authorization between the first checkpoint and the second
4 checkpoint.

1 20. The system of claim 15, wherein the information comprises a unique identifier
2 assigned to a seal that locks the container, and wherein the security state module uses the
3 unique identifier to continually monitor the seal for a status.

1 21. The system of claim 20, wherein the status comprises one from the group
2 consisting of: door open, attempt to open door, door closed, door locked, right door open, and
3 more than one door open.

1 22. The system of claim 20, wherein the status comprises an environmental state
2 from the group consisting of: temperature, humidity, vibration, shock, light, and radiation.

1 23. The system of claim 15, further comprising a seal device to detect a security
2 breach, wherein the security state module resets the security state responsive to the second
3 agent submitting an indication that the container was resecured.

1 24. The system of claim 15, wherein the security state module changes the
2 security state responsive to receiving an inspection request from a customs control center.

1 25. The system of claim 15, wherein the security state module submits a required
2 body of information, including the information, to a customs control center, and receives an
3 inspection request responsive to the required body of information.

1 26. The system of claim 15, wherein the first agent is located at an origin port of
2 an export country and the second agent is located at a destination port of an import country.

1 27. The system of claim 15, wherein the required body of information module
2 receives the information from a first reader at the first checkpoint through a first control
3 center, the security state module receives continuous monitoring information from a second
4 reader; and receives a validation confirmation from a third reader at the second checkpoint
5 through a second control center.

1 28. The system of claim 15, wherein the container comprises an RFID (radio
2 frequency identification) tag, and the first, second, and third readers comprise an RFID
3 reader.

1 29. A computer product, comprising: a computer-readable medium having
2 computer program instructions and data embodied thereon for a method of tracking a security
3 state for an intermodal container through a global supply chain, comprising:
4 initiating a security state for the intermodal container with information submitted by a
5 first trusted agent located at a first checkpoint;
6 continuously monitoring the security state of the container during transport between
7 the first checkpoint and a second checkpoint, the security state adapted to
8 change responsive a security breach; and
9 sending the security state to a second trusted agent located at the second checkpoint
10 for validation.

1 30. The computer product of claim 29, wherein the step of initiating the security
2 state comprises initiating the security state to a secure state responsive to an inspection by the
3 first trusted agent.

1 31. The computer product of claim 29, wherein the step of continuously
2 monitoring the security state comprises changing the security state responsive to a security
3 breach defined by security business rules.

1 32. The computer product of claim 29, wherein the step of initiating the security
2 state comprises initiating the security state with a required body of information comprising
3 information concerning a unique identifier assigned to a seal that locks the container, and
4 wherein the step of monitoring the security state comprises using the unique identifier to
5 continually monitor the seal for a status.

1 33. The computer product of claim 29, further comprising the steps of:
2 detecting the security breach; and
3 resetting the security state responsive to the second agent submitting an indication

4 that the container was resecured.

1 34. The computer product of claim 29, further comprising the steps of:
2 receiving an inspection request from an authority; and
3 changing the security state responsive to the inspection request.

1 35. The computer product of claim 29, further comprising the steps of:
2 submitting a required body of information, including the information, to an authority;
3 wherein the authority sends the inspection request responsive to the required body of
4 information.

1 36. The computer product of claim 29, wherein the first agent is located at an
2 origin port of an export country and the second agent is located at a destination port of an
3 import country.